judgedate:

January 28, 1969

caseid:

1964 (Gyo-Tsu) 92

casename:

A case of seeking rescission of the JPO decision

casetitle:

Judgment related to a case where prevention of a danger and a safe operation were supposed to be a requirement of invention completion of a device

summary judge:

1. The energy generating device using a nuclear fission phenomenon of natural uranium by bombardment of neutrons does not fall under an industrial invention referred to in Article 1 of the Old Patent Act (Act No. 96 of 1921) unless it is technically completed such that a danger unavoidably involved in the aforementioned nuclear fission is prevented and the device is operated steadily and safely.

2. In the description, an invention which is not described with technical contents embodied or objectified to such a degree that a person with ordinary knowledge/experience in the technical field could work it repeatedly is technically incomplete and does not fall under an industrial invention referred to in Article 1 of the Old Patent Act (Act No. 96 of 1921).

3. When determining whether the invention is technically completed at the time of filing of the patent application, use of a fact proved after the aforementioned filing as a material is allowed.

court second:

Tokyo High Court, Judgment of September 26, 1963

references

Article 1 of the Old Patent Act (Act No. 96 of 1921)

Main text

The present final appeal shall be dismissed.

Appellant of the final appeal shall bear the final appeal costs.

Reasons

Reasons for final appeal of final appeal attorneys $\bullet \bullet \bullet \bullet$, $\bullet \bullet \bullet \bullet$, $\bullet \bullet \bullet \bullet$, and $\bullet \bullet \bullet \bullet$

First to third points (Statement of Reasons for Final Appeal, Part 2, Chapter 1)

According to the description, the invention of the present application is described as having an object to obtain, in brief, an energy generating device which can be effectively used industrially by using a nuclear fission phenomenon of natural uranium by neutron bombardment without causing energy explosion generated in the nuclear fission. If it is an invention of such a device, it is different from a simple tool for academic experiments and it should naturally be a technically completed one capable of operating such that the energy can be taken out at least steadily and safely. For that purpose, an idea of a specific method which can suppress enormous danger unavoidably involved in nuclear fission arising in a chained manner as well as specific means for generating the nuclear fission phenomenon by the neutron bombardment in the chained manner and for sustaining it in an appropriately controlled state should be considered indispensable as its technical contents.

The gist asserts that steady and safe operation of the device does not belong to the requirement of technical completion of the invention and also argues that in order to be an industrial invention referred to in Article 1 of the Old Patent Act, a technical effect of the invention only needs to be industrial. However, it covers eyes to the fact that the invention of the present application has an object to safely control the nuclear fission phenomenon arising in a chained manner, and since it is found to be hardly worked steadily and safely and to be technically incomplete, it should be considered not to even reach a degree that industrial technical effects are generated as an energy generating device.

The gist asserts that finding by the judgment in prior instance that the invention of the present application cannot be worked with the recitation in the description on the ground of Exhibit Otsu 2 (Research report prepared by a senior researcher D at a science laboratory, commissioned by the appeal judge at the Japan Patent Office, hereinafter referred to as the D report) is unreasonable, and first, the recitation in the D report has contradiction and errors. However, the point pointed out as the

contradiction is only an assertion that the invention of the present application is found to be capable of being worked as in the description, without correctly understanding the aforementioned report by grasping the speculative recitation part. Moreover, in the aforementioned report, although the recitation that thorium is used as a fuel material in the description of the invention of the present application after correction has been deleted, it is described that the natural thorium cannot be used as a fuel material as it is, and even if it is theoretically possible, a natural-uranium heavy-water homogenous reactor which is inefficient and is not even considered to matter in a working aspect is overlooked, and that a heterogenous structure is indispensable for combination of natural uranium and a moderator substance, both of which are not even errors. The aforementioned report points out, in relation with control of a nuclear reactor, imperfection of a control method not considering an influence of "delayed neutron", but it is not described that the device of the invention of the present application does not include a control method by cadmium, but mainly uses self-control by a temperature as in the statement.

In addition, the gist asserts that the D report does not use a fact that was publicly known at the time of filing of the present case as a material for determination at all, but there is no evidence to admit that. It is also sufficiently presumed from the teaching in the judgment in prior instance that the statement blaming the court of prior instance's failure to examine, from a legal viewpoint, the aforementioned report made from a technical viewpoint is not appropriate. Then, illegality in evidence collection or unexhausted examination as in the statement is not found in the judgment in prior instance.

The gist further asserts that the point held by the judgment in prior instance that disclosure was insufficient in the description of the invention of the present application is not defective as the description, but the invention of the present application should be able to be operated and worked from the recitation as in the description by the technical level at the time of filing. That is, the judgment in prior instance pointed out that uranium, graphite, beryllium, and the like used as fuel materials and moderator substances should require those with especially high purity, but the description does not have clear specification except on heavy water, while the gist states that this was already publicly known and belonged to the common general technical knowledge at that time and does not even have to be described in the description. However, since those with much higher purity than the substances generally produced by the technology at that time are required, it is natural that it should be disclosed in the description and it belongs to another problem separate from

the recitation of resonance absorption in the statement. Even if tolerances of the required purities are different depending on the type of the substance or combination thereof, analogies can be made only by explanation with a few examples, and it cannot be found that explanation cannot be made. Subsequently, the judgment in prior instance pointed out that arrangement of natural uranium and moderator substances should have a heterogenous structure, but the description lacks such recitation, while the gist asserts that probability of the homogenous structure of natural uranium and heavy water is argued and there is also recitation on a heterogenous structure. However, the fact that an exception was not allowed for the heavy water is not even considered to be an error in the working aspect as described above. There is no sufficient recitation on whether the many moderator substances listed in the description should have a heterogenous structure, by what kind of structure or treatment, or if it is not even required, and this should be considered a defect as the description of the invention of the present application. The holding in prior instance which determined that a use amount of the heavy water in the embodiment was too small is not unreasonable, either. Moreover, the judgment in prior instance held that consideration is insufficient in the description on a degree of neutron absorption in a substance constructing a facility such as a cooling substance, a piping material, and the like introduced into the nuclear reactor and moreover, consideration is insufficient on the heat generated when the nuclear reactor is operated, uranium with strong radiation, the heavy water, and an influence given on the aforementioned substances, but the gist states that it is not such that they are not considered in the description but they are matters not even requiring recitation. However, it cannot be found that the constructing substances are self-determined by illustrated formulas, and it should be understood that specific disclosure such as a structure and the like which withstand these dangers is needed as the technical contents thereof for this device to be operated steadily and safely. Moreover, the judgment in prior instance judged that lack of recitation in the description on the control method of the nuclear reactor while being aware of the "delayed neutron" is defective, while the gist argues that, since generation of the "delayed neutron" rather improves safety of the nuclear reactor, it does not have to be considered. However, it is found that alleviation of an increase in the neutron by a chain reaction of nuclear fission by that is limited to within a certain range, and the recitation cannot be made unnecessary.

Other than the above, the judgment in prior instance points out that there is no clear disclosure in the description or the attached drawings on a critical amount of the

raw material for generating the chain reaction of the nuclear fission, while the gist asserts that the critical amount differs depending on individual devices, and it is impossible to describe the specific values thereof in the description, and the larger the raw material amount is, the more easily the nuclear chain reaction can occur and thus, it is unnecessary to make it clear in advance. However, the nuclear chain reaction does not arise until the raw material reaches the critical amount, and the energy is not generated and thus, disclosure of the critical amount or a method for measuring this should be considered to be a basic matter in the invention of the present application.

In the description of the invention, although recitation is not necessarily needed for a matter of common knowledge in the technical field to which the invention belongs as in the statement, the judgment in prior instance held that, regarding the common knowledge level in the technical field at the time of 1939 when the present patent application was first made in France, according to each article in 1, 2, and 3 of Exhibits Ko 1 and Ko 2 (reports of the magazines "NATURE" issued in April of 1939 and "L'ACADEMIE DES SCIENCES" issued in March of the same year) and other documents, it is not found that common knowledge related to the technology for realizing the nuclear reactor had advanced to such a degree that already solved the points pointed out to be incomplete about the aforementioned recitation in the description. Moreover, in view of the recitation in Exhibit Ko 27 (H. D. Smith, Atomic energy for military purposes), it is extremely suspicious that actual common knowledge had advanced to such a degree that a person having common knowledge in the technical field at that time could have worked the invention of the present application by viewing the present description, and particularly regarding the aforementioned critical amount, it was held that, although a possibility of the nuclear chain reaction arising was found at that time, realization thereof was difficult, and it cannot be found at all that measurement or estimation of the critical amount could be easily made by several experiments as described in the first description of the invention of the present application. And there is no point that should be considered to be illegal in this finding. Then, the statement which blamed the judgment in prior instance which held that the recitation in the present description was insufficient and that the invention of the present application could be worked with the technical level at that time by the aforementioned description is utterly unacceptable.

It is to be noted that the gist asserts, regarding the invention of the present application, that the judgment in prior instance does not determine whether it can be genuinely movable, from a viewpoint that steady and safe operation thereof does not fall under the requirement to be an invention and that mobility of the invention of the

present application should be sufficiently found by the recitation in the description thereof, but such viewpoint cannot be employed, and it is obvious that the statement has no grounds as described above.

None of the gist can be employed.

Fourth to sixth points (Statement of Reasons for Final Appeal, Part 2, Chapter 2)

The invention is a creative idea related to certain technologies based on use of natural laws, but in view of the purpose of the patent system, the created technical contents should be embodied and objectified to such a degree that any person with common knowledge/experience in the technical field could repeatedly work this and exert the technical effects which are the objects thereof. Therefore, it should be considered that one with the technical contents not constituted to this degree is incomplete as an invention and does not fall under an industrial invention referred to in Article 1 of the Old Patent Act in the first place.

<u>Incidentally</u>, in the procedures of a patent application, the entire technical contents of the invention as above are disclosed in the description (including the attached drawings, the same applies to the following) and the recitation thereof are targets of examination. Whether the invention has been technically completed or not is also determined by the recitation in the description. Then, if the technical contents of the invention are not sufficiently embodied or objectified in the recitation and it cannot be approved that a person having ordinary knowledge in the technical field thereof could easily work it, the substance of the invention could be determined to be technically incomplete and not to constitute the invention. The judgment in prior instance which interpreted that the recitation in the description of the invention of the present application is incomplete and as a result, it does not fall under the industrial invention referred to in Article 1 of the Old Patent Act can be found to be reasonable as one based on such viewpoints, and to be reasonable. The gist blames that the finding that the invention is incomplete since the recitation of the description is incomplete is confusion of the problem of disclosure in the description with the problem of completeness of the invention, but that should be considered an argument ignoring the principle of the laws which have the substance of the invention and presence/absence of the capability of the patent examined through the recitation in the description.

The recitation of the technical contents of the invention in the description should be indicated to such a degree that a person with the ordinary knowledge in the technical field could easily work it, because that is a matter of course in order to disclose the technical completeness of the invention as described above, and it does not even have to refer to the provisions in Article 38, paragraph (3) and Article 57,

paragraph (1), item (iii) and the like of the Enforcement Regulations under the Old Patent Act. Therefore, as taught in the gist, the provisions to be applied to the invention of the present application are not considered to influence the result of determination in the judgment in prior instance even if they are before revision of each of the aforementioned regulations. (It is to be noted that the revision of the aforementioned Enforcement Regulations only moved up Article 38, paragraph (4) to paragraph (3) and has no changes in contents of the regulations, but the aforementioned provisions in the Patent Act prescribe that, after the revision, if matters required for working of the invention are not described in the description, it constitutes a cause for patent invalidation even after wrong registration, while before the revision, the patent invalidation cause shall be constituted only in a case where the aforementioned matter was not intentionally described, which is a difference. However, those before the revision are found to limit the case where the patent shall be invalidated in terms of political measures, since they were once granted registration, and it should not be argued to the contrary to the provisions that the invention does not necessarily have to be described in the description to such a degree that the invention could be worked as long as it is not on purpose before the aforementioned revision. The aforementioned provisions before the revision were based on the premise that the invention should be described in the description to such a degree that the invention could be worked as after the revision.)

The gist asserts that the judgment in prior instance misunderstood the meaning of the degree that a person with ordinary knowledge in the technical field could easily work it and unreasonably requested even disclosure of detailed matters of the invention of the present application in the description thereof, and it also has illegality of lack of trial examination on whether or not those are matters that an expert in the technical field could not have known easily. However, the points that the judgment in prior instance asserted that the recitation in the present description was insufficient were legally found on the ground of the D report found to be reported with professional knowledge, and those matters and the fact that the critical amount was not sufficiently made clear in the technical field at the time of filing of this case are also found legally by each of the cited evidences. And there is no evidence sufficient to find that those matters are detailed matters which were not important for safe operation of the nuclear reactor. Then, there is no illegality in the statement in the judgment in prior instance which judged as above, since it is not found that a person with ordinary knowledge in the technical field could easily work it repeatedly in accordance with the recitation in the aforementioned description.

None of the gist can be employed.

Seventh to ninth points (Statement of Reasons for Final Appeal, Part 2, Chapter 3)

The gist asserted that the judgment in prior instance ignores the obvious recitation in the description of the invention of the present application and held that it does not specifically make clear the means for preventing danger and ensuring safety, but it is found that the judgment in prior instance did not hold that there is no recitation on the means at all as in the statement but the recitation in the description is substantially within theoretical instructions, and not only that specific means is not actively and explicitly indicated but also that consideration or the like is not given on the influence of the radiation to the constructing materials, piping materials, and the like and the control degree of the "delayed neutron" and thus, it was held as above. The gist should be understood that it does not correctly understand the judgment in prior instance.

The danger involved in working of the invention of the present application is peculiar and cannot be prevented by ordinary means such as those employed in general power devices and moreover, it is unavoidable in exerting the function and effect of the device and thus, the specific means for prevention should be considered to constitute the technical contents of the invention. The gist blames that the condition of the mobility of the device of the invention of the present application is confused with the condition of safety by the determination in the judgment in prior instance, but it overlooks the nature of the invention, and the operation of the nuclear reactor cannot be considered without safety. Moreover, since the invention of the present application is found to be technically incomplete, needless to say, the statement that the involvement of danger is the problem of application of Article 3, item (iv) of the Old Patent Act and is not the problem of application of Article 1 of the same Act is not appropriate. Moreover, the gist asserts that the invention can be considered to be incomplete because of the danger in the case where the danger can prevent generation of the effect of the invention, and regarding the invention of the present application, such cases fall under this such that, if the device is worked, explosion occurs unavoidably or energy cannot be taken out in a controlled manner due to the danger and such that the invention of the present application is not incomplete. However, it is counterargument on the ground that steady and safe operation of the device is not considered to be a requirement of this invention and the characteristics of the invention of the present application is misunderstood, and cannot be accepted.

Other than the above, the gist argues that the judgment in prior instance regards

the device of the invention of the present application as essentially dangerous not on the ground of the technical level at the time of filing of this case and loses sight of the essential difference between an atomic bomb and the nuclear reactor. However, in that point, since an atomic bomb-type rapid chain reaction itself was impossible at the technical level at the time of the invention of the present application, the atomic-bomb type danger could not occur at all, no matter how the nuclear reactor was created, and the nuclear reactor does not have a danger. However, there is no ground to find that the judgment in prior instance determined necessity of securing safety by finding the danger of the invention of the present application similar to that of the atomic bomb. If control of the nuclear reactor is not appropriate when it is operated, the nuclear chain reaction is intensified, and it should not be considered that there is no fear of explosion, and some disastrous accidents having occurred in nuclear reactors in many countries so far are well known in general. Such dangers are present, regardless of whether the technical level at that time is aware of them or not. The same applies to the dangers of beta rays, gamma rays, and neutron rays generated in the nuclear The judgment in prior instance points out that the invention of the present application is insufficient about specific means to handle these dangers, and the gist should be considered to be beside the point.

The gist has no grounds.

Tenth point (Statement of Reasons for Final Appeal, Part 2, Chapter 4)

The gist asserts that, at examination of a patent application, determination on completion of the invention and possibility of working thereof by a third party should be made on the basis of the technology at the time of filing without fail, but the judgment in prior instance made determination on the disclosure of the invention of the present application in the description by considering knowledge which was not made obvious until timing after the application, and this is wrong interpretation/application of laws.

However, the determination on whether the invention has been completed or not on the basis of the time of filing is to determine whether the invention had been already technically completed at the time of application thereof and is not to determine presence of completion on the basis of technical knowledge proved at the time of the filing. In the aforementioned determination, there is no reason not to allow the use of the fact as a material even if it was proved after the filing. By applying this to this case, at the time of filing of the invention of the present application, when determination is to be made on whether the technical contents as described in the description could be operated so as to generate the function and effect

intended by the invention at the technical level at that time, use of the knowledge related to the operation of the nuclear reactor proved after the filing as a material is not prevented at all. Then, even if the conditions found to be required for the operation of the nuclear reactor in the judgment in prior instance include those based on the knowledge proved after the filing of this case, the illegality of the statement is not present. Therefore, the recitation in the description should be determined on the basis of the technical knowledge at the time of filing, and even if the matters proved after the filing are not described in the description, it cannot be considered to be defective according to the technical level at that time. And the statement asserting that the determination in the judgment in prior instance on this point is unreasonable is already wrong in its premise and would not be employed.

Eleventh point (Statement of Reasons for Final Appeal, Part 2, Chapter 5)

The gist asserts that, in court of prior instance, the appellant of the final appeal proved that the invention of the present application was granted a patent also in a foreign country, but the judgment in prior instance only responded to that with the holding that legal systems, customs, and technical circumstances are different from those of our country and did not use the fact as a material for fact finding which should be in common to all the countries, or even did not hold to exclude that to the contrary, which is considered to be omission of determination on the evidence and illegality of incomplete reasons.

The appellant of the final appeal submitted Exhibits Ko 3 to Ko 5 (patent descriptions in each of the United Kingdom, Canada, and Germany) in the court of prior instance, but, needless to say, determination was not requested on applicability of the patents according to those patent descriptions. Then, it is impossible to request coordination in determination on them taken by each country as rightfully granted patents. These written evidences are found to be submitted as verification that the invention of the present application constitutes the industrial invention referred to in Article 1 of the Old Patent Act and thus, even though patents were granted in the other countries, the judgment in prior instance held, by indicating these evidences, that the appraisals and the like in Exhibit Otsu 2 (D report) cannot be overturned or the present description cannot be found to be sufficiently complete to be granted a patent in our country and made clear that the aforementioned evidences shall not be employed. Thus, the determination on the evidences is not defective, and the gist has no grounds.

Therefore, the judgment shall be rendered as in the main text with a unanimous consent of the judges in pursuant to Articles 401, 95, and 89 of the Code of Civil

Procedure.

Supreme Court, Third Small Bench

Presiding Judge: YOKOTA Masatoshi

Judge: TANAKA Jiro

Judge: SHIMOMURA Kazuo Judge: MATSUMOTO Masao

Judge: IIMURA Yoshimi